Abstract

Described is a method for executing a software update of a
control unit by flash programming a flash memory of the
control unit having multiple segments via a serial interface,
demands on the flash programming procedure being established,
a sequence of the flash programming procedure being specified
by a finite-state machine which defines states and transitions
of the software, and availability, security, and reliability
requirements of each state and each transition of the finite-
state machine being checked. In addition, described are a
corresponding finite-state machine and a computer program for
automatically checking the availability, security, and
reliability requirements.

(Figure 1)